vinced that the United States is serious about making a more concrete commitment in this area.

Another major issue to be discussed is the poverty–population cycle. Some governments and grassroots activists argue that socioeconomic development should be a priority in dealing with poverty and population. They argue that population growth will continue to be high among the world's poorest peoples unless substantial investments are made in education, training, credit, basic infrastructure, and social welfare services, particularly for women.

Women have been the most prominent and organized participants in planning ICPD and have the most at stake in the policies that will result from the conference. Many women want to ensure sufficient funding to implement development and family planning programs which are women centered and which empower women to have greater control over their lives and achieve gender equality. After family planning, education is probably considered the most important factor in empowering women. Educated women are more likely to use family planning and have lower fertility rates and smaller families. Many women involved in planning the conference have voiced concerns that females must never be targets of population policy without being fully involved in all decisions regarding population and development.

The ICPD Preparatory Committee has prepared a draft Programme of Action, which is being distributed to governments and nongovernmental organizations. It will be finalized and approved in Cairo. The draft program represents the nations' shared understanding of what needs to be done to address the challenges of population, and of development as it relates to population, over the next 20 years. It includes new emphases and approaches to a number of key issues.

# Green Government

President Clinton celebrated Earth Day 1994 at the Meridian Hill Park in Washington, DC, giving a speech which highlighted the administration's environmental accomplishments and addressed work that still needs to be done. "Preserving the environment is at the core of everything we have to do in our own country," he said in his address. Clinton argues that protecting the environment is of utmost importance, yet environmentalists have criticized him for not being aggressive enough in dealing with environmental issues. In his Earth Day address, Clinton countered such charges and called for action in several areas.

A major area in which Clinton has been criticized is budget. The League of Conservation Voters charged in its annual presidential scorecard that Clinton failed to back up his environmental rhetoric with financial commitments (see Spheres of Influence, EHP 102: 370). Clinton's initial budget proposals, which looked promising, were later reduced, including EPA's operating budget. The EPA's operating budget, which pays for all of EPA's core programs except sewage treatment and Superfund, was cut by 1% after inflation, outraging many environmentalists. The administration has countered this move by presenting a 1995 budget proposal which includes a 5% increase in overall spending, including a 13% increase in EPA's operating program budget.

Environmentalists have also criticized Clinton for not pushing more aggressive policies in areas of wetlands preservation, global warming, and protection of endangered species. Yet, in an Earth Day press release, the administration boasts about its progress on breaking the gridlock on wetlands policy. The administration proposed a package that emphasizes protection and restoration of the nation's wetlands and includes reforms to increase the fairness and flexibility of federal regulatory programs; however, environmentalists are still not satisfied with the administration's efforts.

In the area of global warming, Clinton introduced the Climate Change Action Plan, a comprehensive national strategy to

reduce greenhouse gas emissions to 1990 levels by the year 2000. Although the plan has been applauded for its aggressiveness, critics say it does not go far enough because it does not address post-2000 emissions or recommend any specific action to Congress.

The Clinton administration also claimed progress in the area of forest protection. Clinton's Forest Plan, finalized on 14 April 1994, is described by the administration as innovative and unlike any prior federal effort, in that it focuses on entire regions, rather than on a single species. The plan, which was intended to be a compromise between timber interests and environmentalists, provides for the future economic and ecological health of the Pacific Northwest, with \$1.5 billion in federal community assistance. However, environmentalists such as the Wilderness Society and the National Audubon Society are opposed to the plan because it would lift logging bans recently imposed by federal courts that reduce cutting from the high levels of the 1980s and require more protection for wildlife. These groups have filed a lawsuit to block the plan, claiming that it violates the National Forest Policy Management Act and the National Environmental Policy Act. The plan protects about 70% of what remains of the ancient forests in the northwest, leaving about 30% for logging, said Brock Evans of the National Audubon Society. "We all give very high marks to the administration for trying to solve the issue in an environmental way," Evans said. However, "We are challenging [the plan] because we feel all [forests] should be protected. The 30% that they plan to log is some of the best habitat for biodiversity."

In response to environmentalists' charges that he should exert more energy toward advancing Superfund and reauthorization of the Clean Water Act, Clinton cited the administration's recently finalized reform package of the Superfund program and has called on Congress to pass both pieces of legislation. The administration's Clean Water strategy calls for \$10 billion

# CLINTON ADMINISTRATION ENVIRONMENTAL ACTIONS

### 4/21/93

Clinton issues executive orders for alternative-fuel vehicles for federal fleets, energy-efficient computers for government uses, and government phase-out of uses of ozone-depleting chemicals.

Clinton signs international Convention on Biological Diversity.

#### 8/4/93

Executive order on pollution prevention requires federal facilities to cut toxic emissions by 50%.

### 9/19/93

Clinton issues the Climate Change Action Plan to cut greenhouse gas emissions.

# 9/21/93

Clinton establishes Americorps, a national environmental service program for young people.

#### 10/20/93

Executive order requires government agencies to buy recycled paper and environmentally preferable goods.

# 11/22/93

Clinton announces the Environmental Technologies Export Strategy developed by the Departments of Energy and Commerce and EPA to help U.S. companies develop overseas markets.

### 2/11/94

Clinton signs executive order on environmental justice to help ensure equal environmental protection.

### 3/11/94

Clinton announces the "greening of the White House" plan for the administration to take the lead in environmental action.

### 4/14/94

Clinton's forest plan is finalized, focusing on sustainable use of forest ecosytsms.

### 4/19/94

Department of Commerce announces "green GDP" measures, an economicenvironmental accounting framework in federal funds to be provided through the year 2004 to reclaim and rehabilitate America's lakes and streams.

The administration also claims advances in areas pertaining to environmental effects on human health. The EPA is proposing a rigorous health-based standard for pesticides, which would remove dangerous chemicals from the market more quickly and reduce their use by helping farmers employ alternative methods of pest control. Clinton has signed an executive order on environmental justice, which will ensure that hazardous substances are controlled

in such a way that all communities receive environmental protection regardless of race or economic circumstance. Clinton has also created the President's Council on Sustainable Development, a partnership of industry, labor, government, and environmental and civil rights organizations, to explore and develop policies that encourage economic growth, create jobs, and lead to the effective and environmentally sound use of natural resources.

In addition to progress on domestic environmental issues, the administration says it is continuing to advance international environmental issues. Environmental protection was emphasized during the passage of NAFTA, which drew support from a large number of national environmental advocacy groups. The administration negotiated a strong side agreement that includes "green" provisions to protect the environment and improve the quality of life on both sides of U.S. borders. NAFTA is also expected to double the number of American jobs supported by environmental technology exports to Mexico. The administration also served as a leader in achieving environmental gains during negotiations on the General Agreement on Tariffs and Trade including a Trade and Environment Committee on the new World Trade Organization, which will provide a forum for international dialogue on making the multilateral trading system more open and responsive to environmental concerns.

Clinton pointed out the administration's efforts to "green" the government, to serve as an example for the rest of the nation. He issued executive orders for the federal government to use recycled products, reduce federal energy consumption



**Boon or bust?** Soybeans resistant to glyphosate, the weed killer in Roundup, may produce better yields, but scientists worry about toxic and genetic effects.

by 30%, use more vehicles that run on alternative fuel, use energy-efficient computers, and cut toxic emissions in federal facilities by 50%. Not only are these practices environment friendly, but they provide opportunities to save taxpayers money. One visible example of Clinton's efforts was the Earth Day press release that was printed on brown recycled paper and the fact that the 80-page Earth Day 1994 report is available by request only, in order to conserve resources.

# **Sowing Seeds of Controversy**

An emerging trend in agricultural biotechnology is the genetic engineering of crop plants that are resistant to certain herbicides and pesticides. The Department of Agriculture has recently approved two such plants. In February, the USDA deemed genetically altered cotton seeds safe for use, and in June, it approved a herbicide-tolerant soybean. While these altered plants may cut costs and reduce chemical use by farmers, environmentalists question their benefits.

Cotton seeds were genetically altered to increase yield and cut back on herbicide use. The new product, called BXN cotton, was developed by Calgene, Inc. of Davis, California. The altered cotton seeds, which have been tested for four years, contain a gene that dissolves the herbicide bromoxynil. Farmers who now use many different weed killers would be able to use only bromoxynil, which is applied in smaller amounts and less frequently. According to Calgene, the seeds could reduce a farmer's use of herbicides by as much as 40%. The company estimates that farmers spend about \$200 million a year on herbicides, but still lose about \$600 million in reduced yields because of weeds.

Although the new seeds cut back on the use of herbicides, the Union of Concerned Scientists feels that chemical use in agriculture should be diminished even more, because of the dangers posed by chemicals to the environment and human health. The group criticized the new plant product because of its dependence on bromoxynil, which will encourage more widespread use of the chemical. The group also points out that EPA has linked bromoxynil with birth defects.

"We think American farmers should be moving away from herbicide use,

but biotechnology keeps [developing] crops dependent on chemicals," said Jane Rissler, a senior staff scientist at the Union of Concerned Scientists. "We ought to turn to methods of sustainable agriculture. We're using too many chemicals."

EPA is studying an application to market bromoxynil for use with BXN cotton, submitted by Rhone-Poulenc, the world's largest manufacturer of bromoxynil. Rhone-Poulenc helped develop the new seeds under a research agreement with Calgene. The seeds could go on the market as early as 1995, according to Calgene.

Soybeans have also been genetically engineered to withstand a chemical weed killer. Biotechnologists inserted a gene into the soybeans that makes them resistant to glyphosate, a popular weed killer. Glyphosate, sold commercially as Roundup, is an inexpensive herbicide that kills most weeds, and it is the most widely used weed killer in the world. The altered soybeans offer farmers a chance to save money, because they can use only glyphosate, rather than several different herbicides.

Glyphosate is relatively friendly to the environment compared to other herbicides, breaking down more quickly than others. But it is still a toxicant, and Rissler says it could pose problems to other plants if it is misapplied. The EPA will determine whether Monsanto, which genetically engineered the soybean seeds, may use glyphosate on the altered soybean plants. Monsanto is also the manufacturer of glyphosate. The company now plans to grow enough seeds for farmers to plant, which will take at least one and a half years. The company does not expect to sell the seeds until after 1995.